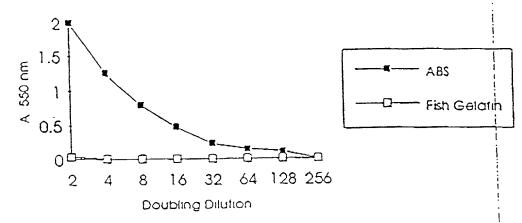
Inventor: Edward Jess VICTORIA, et al. Application No.: To Be Assigned Docket No.: 252312006103

Sheet 1 of 32

Fig. 1 ACA Activity Effect of Serum vs Fish Gelatin



11tle. APL IMMUNOREACTIVE PEPTIDES, CONJUGATES THEREOF AND METHODS OF TREATMENT FOR APL ANTIBODY-MEDIATED

PATHOLOGIES
Inventor: Edward Jess VICTORIA, et al. Application No.: To Be Assigned Docket No.: 252312006103

Sheet 2 of 32



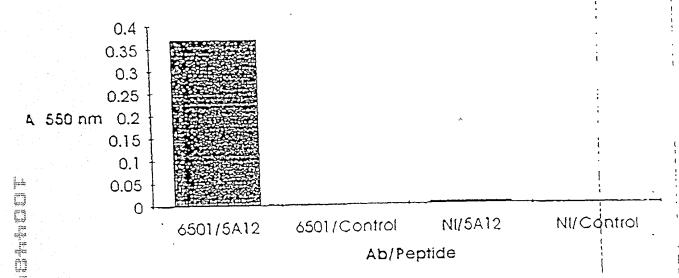


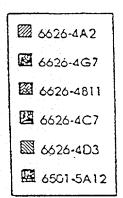
FIGURE 2

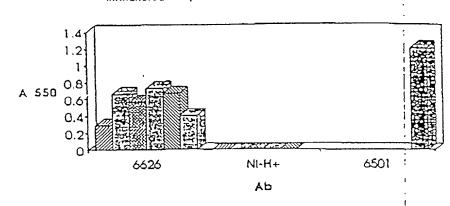
Ittle. APL IMMUNOREACTIVE PEPTIDES, CONJUGATES THEREOF AND METHODS OF TREATMENT FOR APL ANTIBODY-MEDIATED PATHOLOGIES

Inventor: Edward Jess VICTORIA, et al. Application No.: To Be Assigned Docket No.: 252312006103

Sheet 3 of 32

Immunoreactivity of ACA-6626 with Solid Phase Peptides



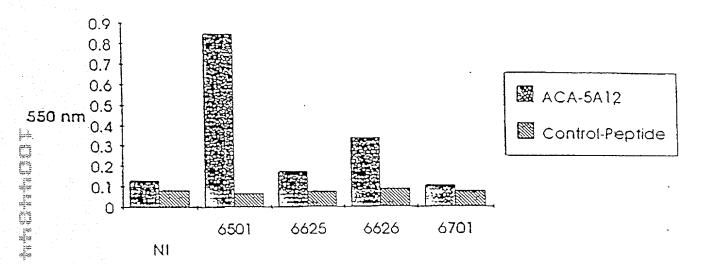


Title: APL IMMUNOREACTIVE PEPTIDES, CONJUGATES THEREOF AND METHODS OF TREATMENT FOR APL ANTIBODY-MEDIATED

PATHOLOGIES
Inventor: Edward Jess VICTORIA, et al.
Application No.: To Be Assigned
Docket No.: 252312006103

Sheet 4 of 32

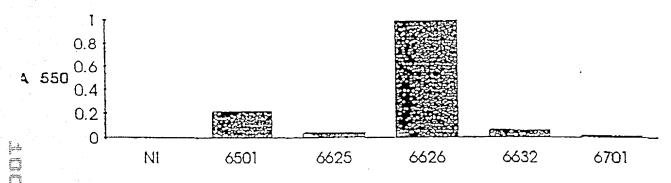
Serum Crossreactivity of ACA 6501-5A12 Peptide



Title. APL IMMUNOREACTIVE PEPTIDES, CONJUGATES THEREOF AND METHODS OF TREATMENT FOR APL ANTIBODY-MEDIATED PATHOLOGIES
Inventor: Edward Jess VICTORIA, et al.
Application No.: To Be Assigned
Docket No.: 252312006103

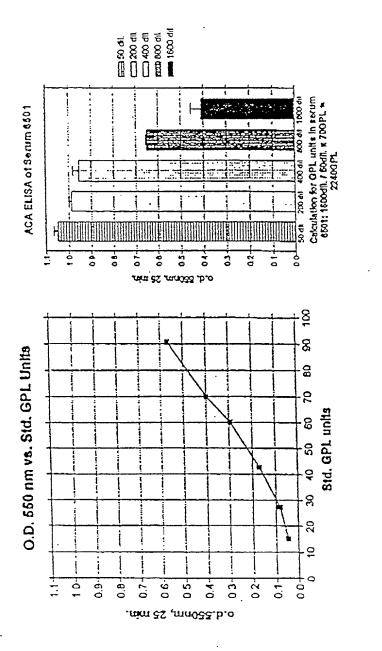
Sheet 5 of 32

Serum Crossreactivity of ACA 6626-4D3 Peptide



PATHOLOGIES
Inventor: Edward Jess VICTORIA, et al.
Application No.: To Be Assigned
Docket No.: 252312006103

Sheet 6 of 32



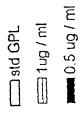
FIGURE

9

To be the state of the state of

PATHOLOGIES
Inventor: Edward Jess VICTORIA, et al.
Application No.: To Be Assigned
Docket No.: 252312006103

Sheet 7 of 32



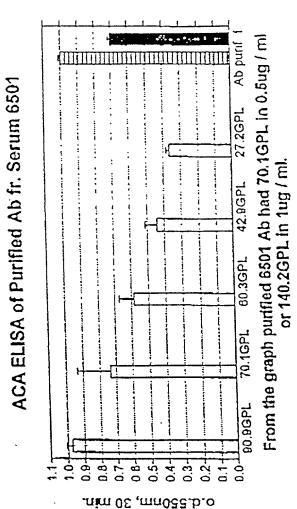
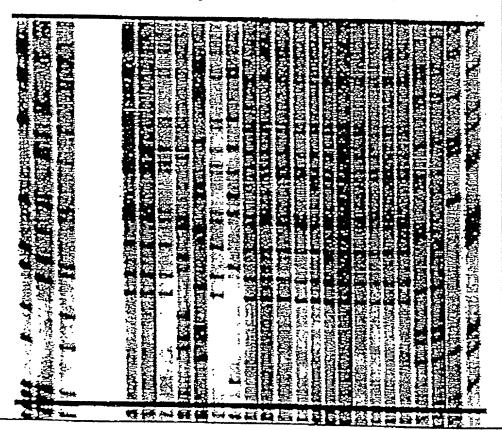


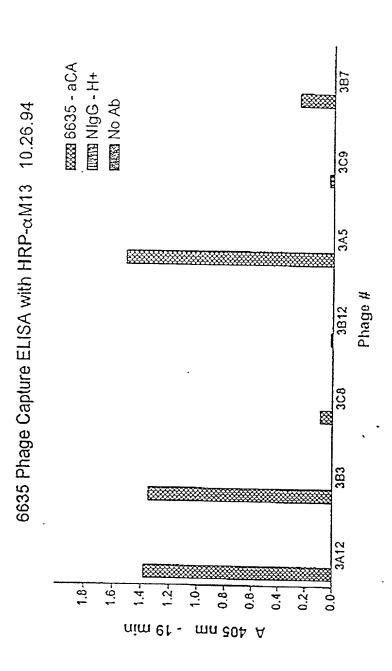
FIGURE 7

6501 G-Track of Random Clones

2nd Round 3rd Round 4rd Round 5rd Round c1c2



Sheet 9 of 32



FIGURE

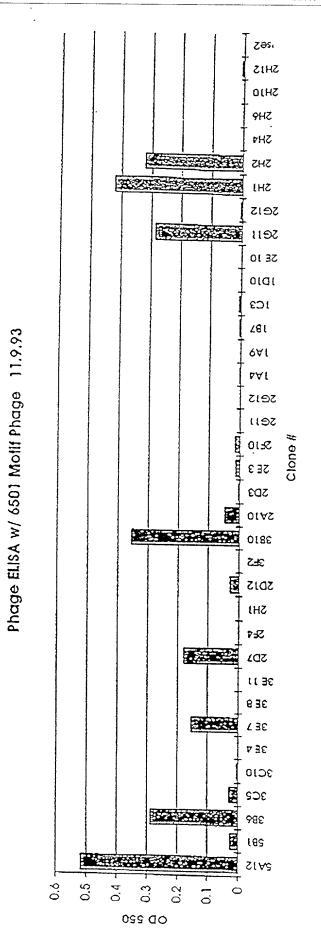
HITE. APL IMMUNOREACTIVE PEPTIDES, CONJUGATES THEREOF AND METHODS OF TREATMENT FOR APL ANTIBODY-MEDIATED

PATHOLOGIES

Inventor: Edward Jess VICTORIA, et al. Application No.: To Be Assigned

Docket No.: 252312006103

Sheet 10 of 32



The the Charles and the the

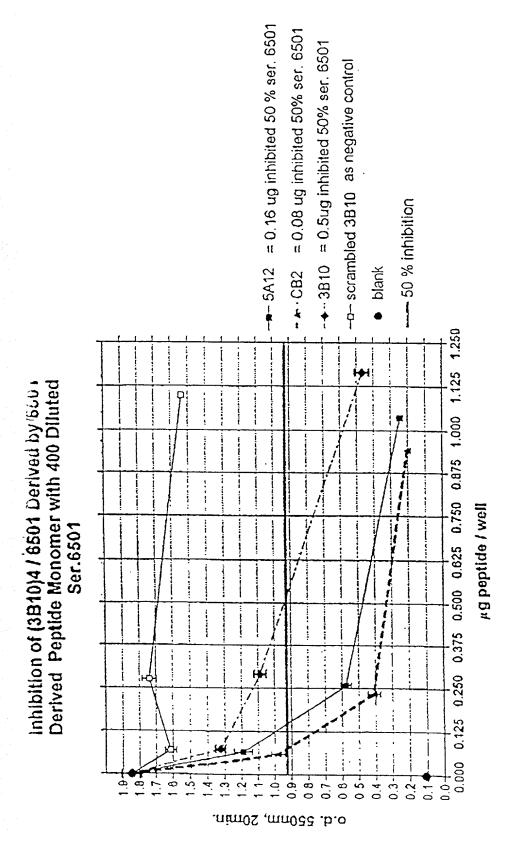


FIGURE 11

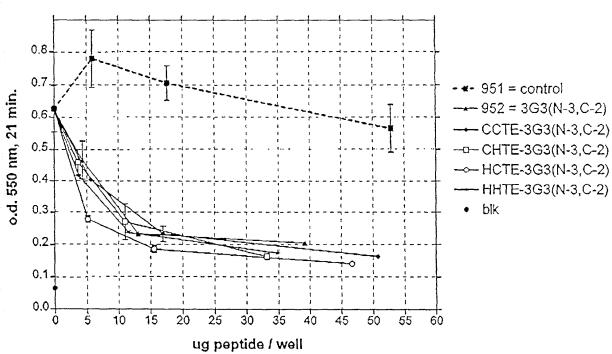
PATHOLOGIES

the state of the s

Inventor: Edward Jess VICTORIA, et al. Application No.: To Be Assigned Docket No.: 252312006103

Sheet 12 of 32

Inhibition of Cdl-2.3%Hu Ser.(no lgG) by Modified Peptides 3G3 with 400x Diluted **Serum 6501**

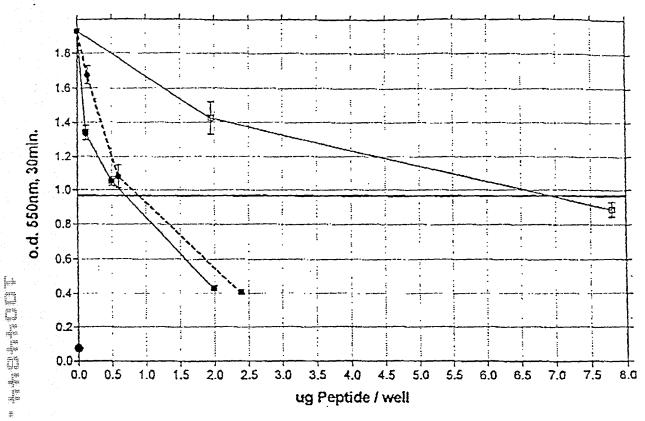


PATHOLOGIES

Inventor: Edward Jess VICTORIA, et al. Application No.: To Be Assigned Docket No.: 252312006103

Sheet 13 of 32

Inhibition of (3B10)4 / 6501 Derived by Truncated or Non-Truncated 3B10 with 400 Diluted Serum 6501



-a-139:-PCLLLAPDRCPG = 6.9 ug inhibited 50% ser.6501

= 142:-GPCLLLAPDRCPG = 0.7 ug inhibited 50% ser.6501

- 143:AGPCLLLAPDRCPG = 0.9 ug inhibited 50% ser.6501

• bik

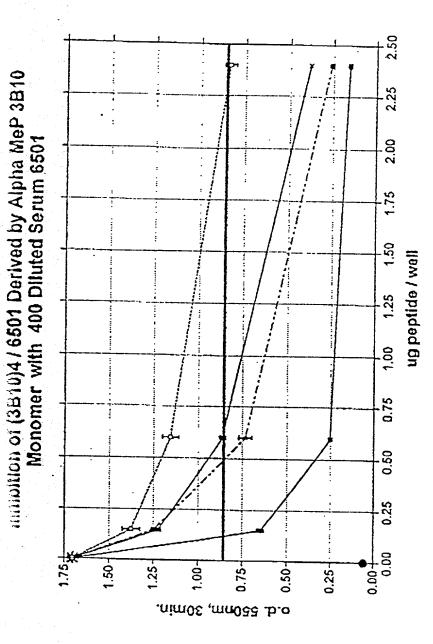
---- 50% inhibition

Title. APL IMMUNOREACTIVE PEPTIDES, CONJUGATES THEREOF AND METHODS OF TREATMENT FOR APL ANTIBODY-MEDIATED

PATHOLOGIES

Inventor: Edward Jess VICTORIA, et al. Application No.: To Be Assigned Docket No.: 252312006103

Sheet 14 of 32



---- 726 = AGMePCLLLAPDRCPG = 2.25ug inhibited 50% ser.6501
---- 727 = AGPCLLLAMePDRCPG = 0.125ug inhibited 50% ser.6501
---- 3B10 = AGPCLLLAMePDRCPG = 0.5ug inhibited 50% ser.6501

* no peptide
blank

FIGURE 14

50% inhibition

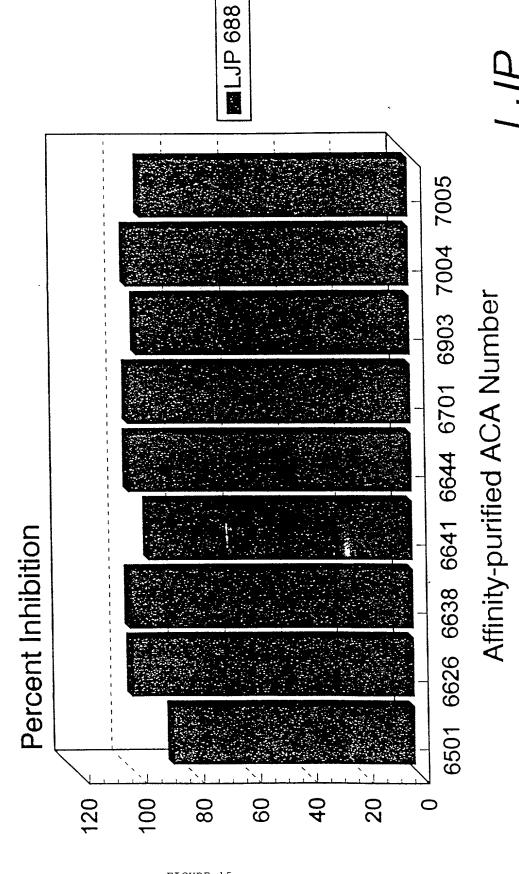
PATHOLOGIES

Inventor: Edward Jess VICTORIA, et al. Application No.: To Be Assigned Docket No.: 252312006103

Sheet 15 of 32

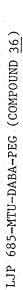
Cross reactivity of peptide LJP 688 with aff-ACA

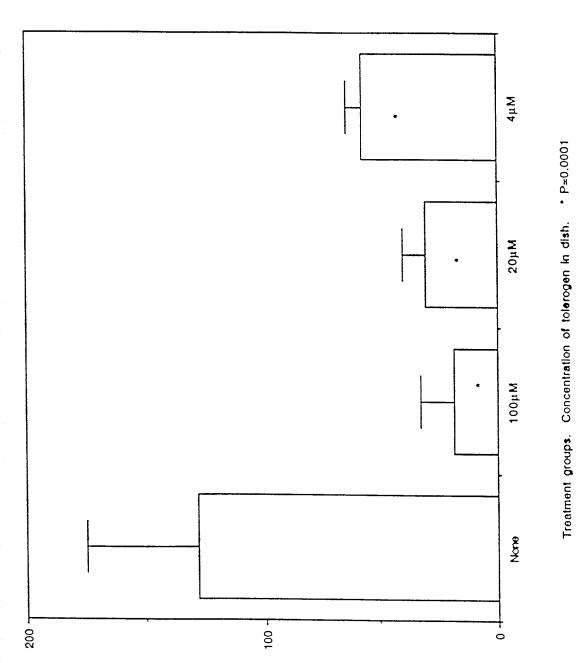
Cardiolipin/β2-GPI-coated plates



1.0 mg/mL peptide

FIGURE 15





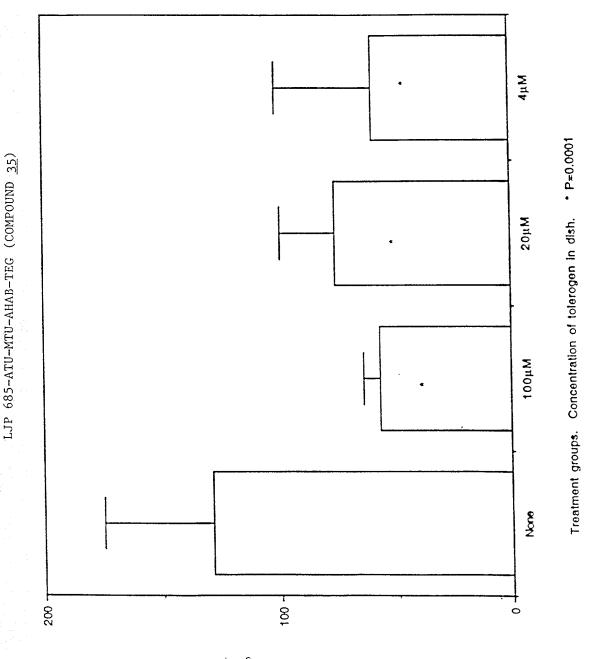
mean and S.D. 5 mice/group M8-01 @ 08A 288-iInA

Figure 16

PATHOLOGIES

Inventor: Edward Jess VICTORIA, et al. Application No.: To Be Assigned Docket No.: 252312006103

Sheet 17 of 32



Anti-685. ABC @ 10-8M mean and S.D. 5 mice/group

Figure 17

Title. APL IMMUNOREACTIVE PEPTIDES, CONJUGATES THEREOF AND METHODS OF TREATMENT FOR APL ANTIBODY-MEDIATED **PATHOLOGIES** Inventor: Edward Jess VICTORIA, et al. Application No.: To Be Assigned Docket No.: 252312006103

Sheet 18 of 32

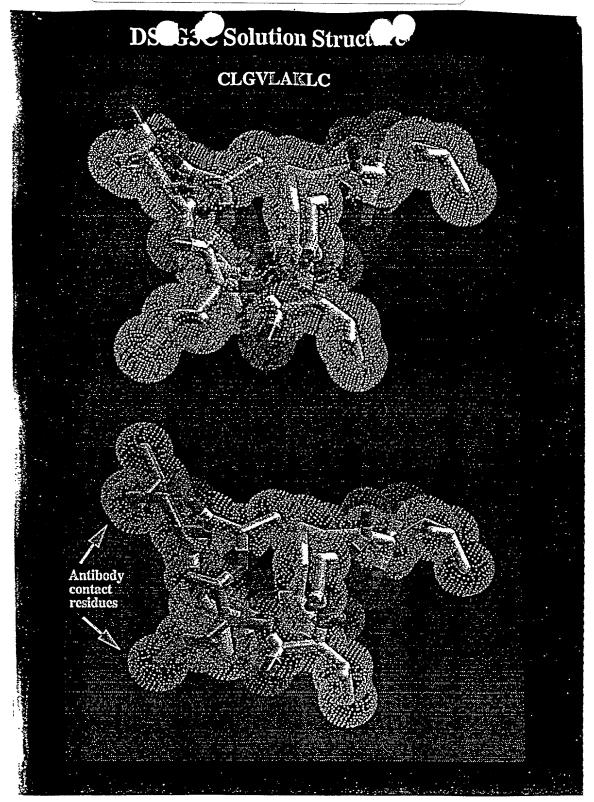
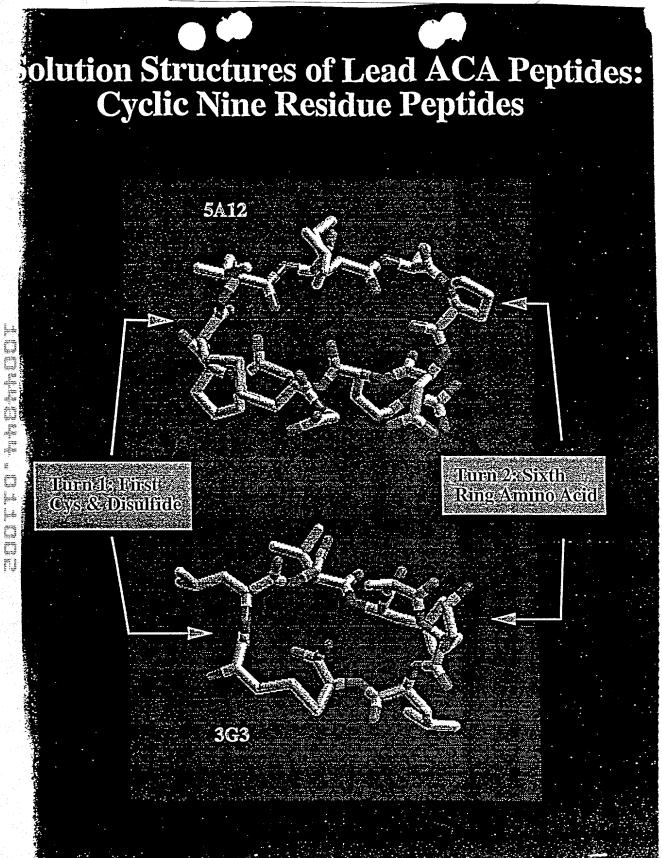


Figure 18

Inventor: Edward Jess VICTORIA, et al.

Application No.: To Be Assigned Docket No.: 252312006103

Sheet 19 of 32



Pharmacophore for binding to anti-cardiolipin antibodies, based on solution structure of DS3G3c (CLGVLAKLC) and alanine scanning of this peptide

Amino or other positively charged group

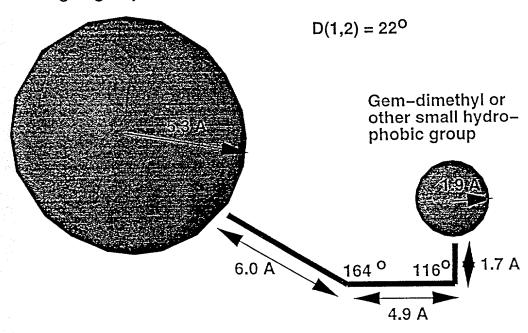
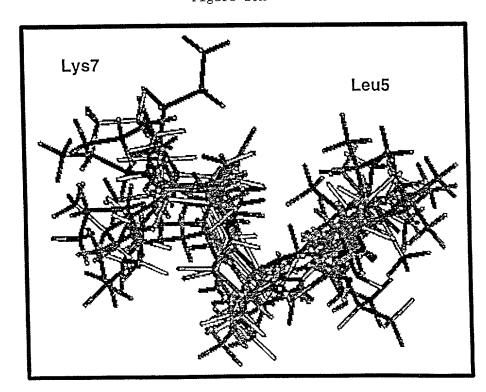
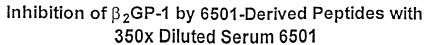


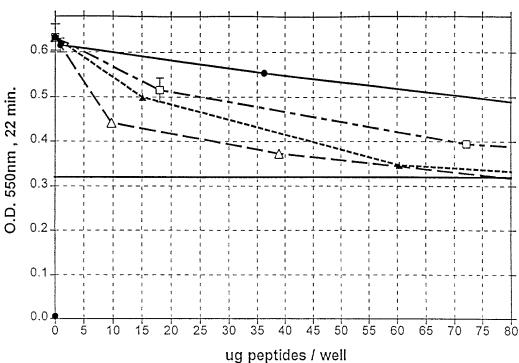
Figure 20A



Fiogure 20B

Sheet 21 of 32





→ 951 = neg. cont.

- ★-·732 = 5A12 = AGPCLILAPDRCPG

 $-\Delta$ - 1140 = CB2 = GPCILLARDRCG

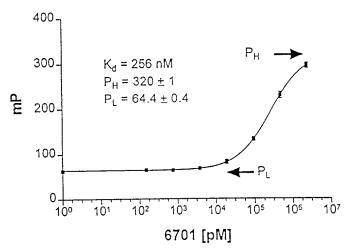
-C- · 1142 = 3B10 = AGPCLLLAPDRCPG

blank

--- 50% inhibition

Sheet 22 of 32

6701 Titration of CB2*-F: (FITC)-GPCILLARDRCG-CO2-

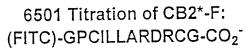


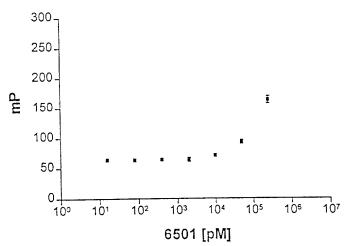
PATHOLOGIES

Inventor: Edward Jess VICTORIA, et al. Application No.: To Be Assigned

Docket No.: 252312006103

Sheet 23 of 32



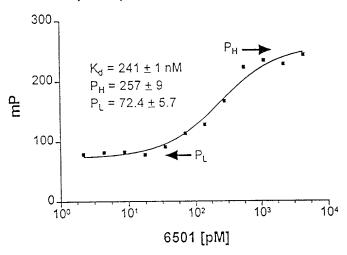


PATHOLOGIES
Inventor: Edward Jess VICTORIA, et al. Application No.: To Be Assigned

Docket No.: 252312006103

Sheet 24 of 32

6501 Titration of CB2*-F: (FITC)-GPCILLARDRCG-CO2⁻

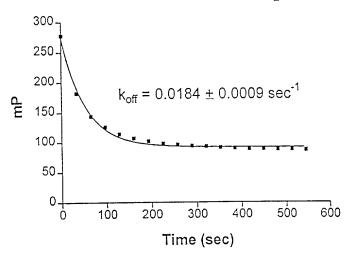


Inventor: Edward Jess VICTORIA, et al.

Application No.: To Be Assigned Docket No.: 252312006103

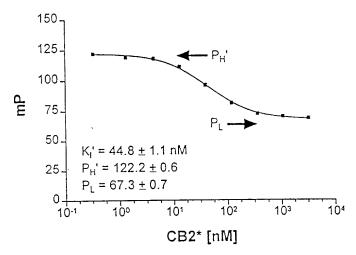
Sheet 25 of 32

Displacement of CB2*-F from 6701 using 1.04 eq. of CB2*: GPCILLARDRCG-CO2-



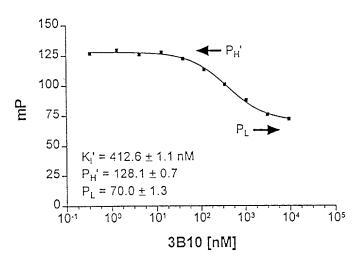
Sheet 26 of 32

CB2* Titration of CB2*-F/6701: CB2*: GPCILLARDRCG-CO₂



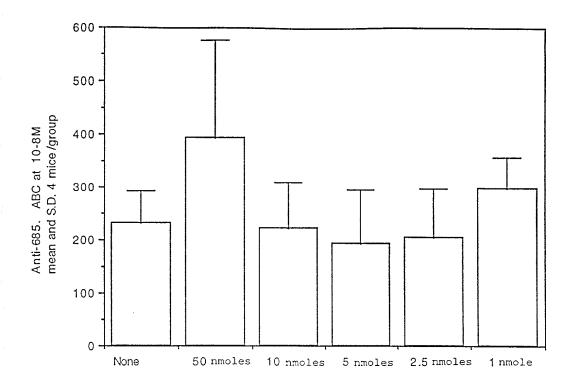
Sheet 27 of 32

3B10 Titration of CB2*-F/6701: 3B10: AGPCLLLAPDRCPG-CO₂



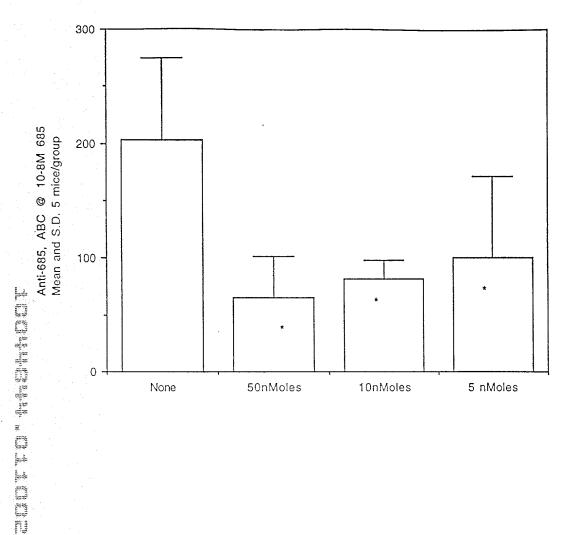
PATHOLOGIES
Inventor: Edward Jess VICTORIA, et al.
Application No.: To Be Assigned
Docket No.: 252312006103

Sheet 28 of 32

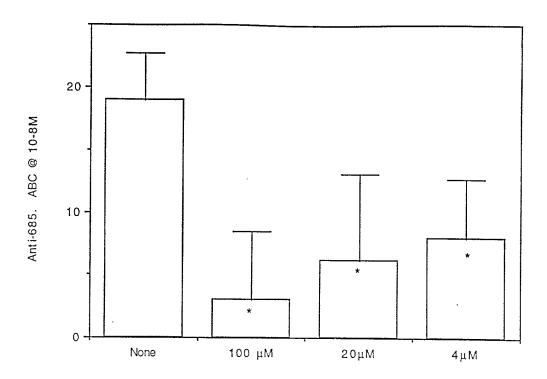


METHODS OF TREATMENT FOR APL ANTIBODY-MEDIATED
PATHOLOGIES
Inventor: Edward Jess VICTORIA, et al.
Application No.: To Be Assigned
Docket No.: 252312006103

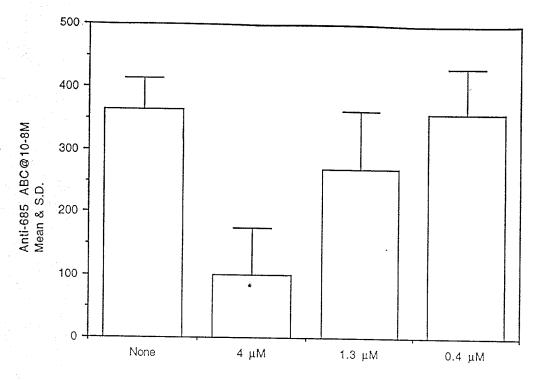
Sheet 29 of 32



Sheet 30 of 32



Sheet 31 of 32



Inventor: Edward Jess VICTORIA, et al. Application No.: To Be Assigned

Docket No.: 252312006103

Sheet 32 of 32

